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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/742,852  
Filing Date: December 21, 2000  
Appellant(s): ELDERING, CHARLES A.

**MAILED**

**JUL 31 2007**

**Technology Center 2600**

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Andrew W. Spicer  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed, 01/19/07, and amended brief, filed 04/25/07,  
the appealing from the Office action mailed 03/24/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,698,020	Zigmond et al.	02-2004
US 2003/0200128 A1	Doherty	10-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 4-6, 55, 56, 59, 60, 75, 78, 79, 90 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond in view of Doherty.

As to claim 4, Zigmond discloses a subscriber system for inserting unscheduled advertisements into at least one channel of media signals (Fig. 7; column 6, lines 4-12, column 10, lines 64-67 and column 11, lines 1-3), the system comprising:

an ad insertion device (Fig. 5; ad insertion device, 80; wherein Fig. 5 is a detailed description of an insertion device used in Fig. 3) configured to determine an order in which an unscheduled advertisement (wherein the stored advertisements simply have rules associated with how to insert them, not specific time schedules; column 17, lines 21-28 and column 11, lines 31-49) is to be inserted into the at least one channel (column 11, lines 50-53 and lines 66-67, column 12, lines 1-9 and column 17, lines 21-25) and insert the unscheduled advertisement into the at least one channel according to

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the order (inserting the next selected advertisement when the trigger is detected; column 17, lines 21-31).

While Zigmond discloses a watchdog module (ad insertion device, 60) coupled to the ad insertion device (contained within the same device), the watchdog module configured to detect a change in current program content being display on the at least one channel (column 10, lines 40-47, column 11, lines 13-18 and column 12, lines 44-53) and output results to the ad insertion device (column 11, lines 13-18 and column 10, lines 40-47), such that the ad insertion device modifies the selection process (column 10, lines 40-47 and column 11, lines 13-17) and wherein a next unscheduled advertisement is selected (column 17, lines 21-25), he fails to specifically disclose determining an order in which advertisements are to be inserted and modifying the order based on a detected change.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (Fig. 1, 140) will create an order for ads to be inserted (schedule; paragraph 29), based upon current advertisement priorities (paragraph 40), to determine the order in which advertisements are displayed (paragraph 38) and modifying the order in response to user action (paragraph 30) to ensure that the suitable advertisements are selected for the new current conditions (paragraphs 38 and 40) for the typical benefit of ensuring that advertisements are properly prepared when needed for output (Fig. 10; paragraphs 28, 38 and 55-57) when saving storage space by taking advantage of more comprehensive compression techniques (paragraph 28).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include determining an order in which advertisements are to be inserted and modifying the order based on a detected change, as taught by Doherty, for the typical advantage of ensuring that advertisements are properly prepared for display when needed thereby promoting efficient advertisement delivery.

As to claim 5, Zigmond and Doherty disclose a remote control device (see Zigmond at Fig. 8; input device, 150) in communication with the watchdog module (see Zigmond at column 9, lines 21-30 and lines 52-55), wherein the watchdog module detects change in the program content based on outputs from the remote control device (wherein the current program type, selected by the user, is monitored for ad selection; see Zigmond at column 10, lines 40-47, column 11, lines 13-18 and column 12, lines 44-53).

As to claim 6, Zigmond and Doherty disclose wherein said watchdog module detects change in the program content based on program information (monitoring the current program being viewed; see Zigmond at column 9, lines 21-30 and lines 52-55 column 12, lines 44-67 and column 13, lines 1-6) and outputs received from the remote control device (wherein the current program is inherently based upon the current channel selection; see Zigmond at column 9, lines 21-30 and column 12, lines 44-66 and Fig. 8).

As to claim 55, Zigmond and Doherty disclose wherein said ad insertion device determines if a particular change in the currently displayed program content (wherein the current program the user has selected is monitored for ad selection; see Zigmond at column 10, lines 40-47, column 11, lines 13-18, column 12, lines 44-column 13, line 14) is sufficient to modify the order (see Doherty at paragraph 30).

As to claim 56, Zigmond and Doherty disclose a tuner (wherein a broadcast television receiver inherently contains a tuner; see Zigmond at column 7, lines 13-25) configured to tune to a channel selected by the subscriber (column 9, lines 21-28 and column 13, lines 12-28), wherein said watchdog module detects change in program content (see Zigmond at column 9, lines 21-28 and column 13, lines 12-28) by monitoring what channel the tuner is tuned to (wherein channel changes, requiring tuning to a new channel, are monitored; see Zigmond at column 9, lines 21-28 and column 13, lines 12-28).

As to claim 59, Zigmond and Doherty disclose a profiler (viewer and system information, 82) configured to process subscriber interactions and generate a viewing session profile (see Zigmond at column 9, lines 65-67, column 10, lines 1-3 and lines 36-47 and column 11, lines 13-18), wherein the viewing session profile defines characteristics related to a subscriber for a viewing session (preferred channels and programs; see Zigmond at column 10, lines 40-47 and column 11, lines 15-18).

As to claim 60, Zigmond and Doherty disclose wherein said watchdog module detects changes to viewing session profiles (see Zigmond at column 10, lines 40-47) and wherein the ad insertion device also modifies the order (modifying the order based upon user action; see Doherty at paragraph 30) based on changes to the viewing session profiles (see Zigmond at column 10, lines 40-47 and column 11, lines 13-17).

As to claim 90, Zigmond discloses a method of presenting targeted advertisements to a subscriber viewing program content on a display device (Fig. 7; column 6, lines 4-12, column 10, lines 64-67 and column 11, lines 1-3), the system comprising:

- detecting an advertisement space associated with the program content (column 15, lines 35-44);

- presenting the targeted advertisements to the subscriber in the detected advertisement space (column 15, lines 52-65); and

- detecting a change in program content currently being displayed to the subscriber (wherein the current program the user has selected is monitored for ad selection; see Zigmond at column 10, lines 40-47, column 11, lines 13-18, column 12, lines 44-column 13, line 14).

While Zigmond discloses unscheduled targeted advertisements to be presented to the subscriber (wherein the stored advertisements simply have rules associated with how to insert them, not specific time schedules; column 17, lines 21-28 and column 11,



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lines 31-49) and detecting a change in current program content being displayed to the subscriber (wherein the current program the user has selected is monitored for ad selection; see Zigmond at column 10, lines 40-47, column 11, lines 13-18, column 12, lines 44-column 13, line 14) and selecting an advertisement based upon a change in program content currently being displayed to the subscriber (selecting the next ad based upon the new currently viewed program; column 10, lines 40-47 and column 11, lines 13-17 and column 12, line 44-column 13, line 14), he fails to specifically disclose generating a queue indicating the order in which advertisements are to be presented and reordering the queue according to the detected change.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (Fig. 1, 140) will create an order for ads to be inserted (schedule; paragraph 29), based upon current advertisement priorities (paragraph 40), to determine the order in which advertisements are displayed (paragraph 38) and modifying the order in response to user action (paragraph 30) to ensure that the suitable advertisements are selected for the new current conditions (paragraphs 38 and 40) for the typical benefit of ensuring that advertisements are properly prepared when needed for output (Fig. 10; paragraphs 28, 38 and 55-57) when saving storage space by taking advantage of more comprehensive compression techniques (paragraph 28).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include determining an order in which advertisements are to be inserted and modifying the order based on a detected

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change, as taught by Doherty, for the typical advantage of ensuring that advertisements are properly prepared for display when needed thereby promoting efficient advertisement delivery.

As to claim 75, Zigmond and Doherty disclose wherein said detecting occurs by monitoring what channel the subscriber is viewing (see Zigmond at column 9, lines 21-28 and column 12, line 44-column 13, line 28).

As to claim 78, Zigmond and Doherty disclose profiling subscriber interactions (contained within viewer and system information, 82) in order to generate a viewing session profile (see Zigmond at column 9, lines 65-67, column 10, lines 1-3 and lines 36-47 and column 11, lines 13-18), wherein the viewing session profile defines characteristics related to a subscriber for a viewing session (preferred channels and programs; see Zigmond at column 10, lines 40-47 and column 11, lines 15-18).

As to claim 79, Zigmond and Doherty disclose detecting changes to viewing session profiles (see Zigmond at column 10, lines 40-47) and wherein reordering (modifying the order based upon user action; see Doherty at paragraph 30) is also based on changes to the viewing session profiles (see Zigmond at column 10, lines 40-47 and column 11, lines 13-17).

As to claim 91, Zigmond and Doherty disclose wherein the queue is reordered in real time (wherein the schedule is modified as interactions are detected; see Doherty at paragraphs 30 and 25).

#### **(10) Response to Argument**

On pages 8-9 appellant argues that there is no suggestion or motivation to combine Zigmond and Doherty.

In response, Zigmond discloses an advertisement system wherein advertisement are selected based upon the current program being watched by the viewer (column 12, lines 44-53). Further, Zigmond specifically discloses wherein the system will monitor user actions such as channel changes and programming watched (column 11, lines 15-30). In response to the user action, such as changing the channel and programming being viewed, the system will select the *next* ad based upon the new conditions (i.e. new program being viewed when an ad is to be inserted; Fig. 6, steps 108-116; column 12, lines 44-51 and column 17, lines 23-28).

Doherty discloses a system which creates a listing which indicates the order in which a plurality of upcoming advertisements are to be displayed (paragraphs 25, 29 and 38). In response to a user action (paragraphs 30 and 31) the system will then modify the order the ads are to be displayed (paragraphs 38 and 40) based upon the new current conditions (i.e. reordering the schedule based upon the changes in the priority in which ads should be displayed; paragraphs 38 and 40). Doherty will adjust the

order of the next ad and additional ads based upon a detected change in the current viewing conditions.

The Doherty system can compile and prepare advertisements in advance to eliminate any possible delay (see Doherty at paragraphs 28 and 38). As further explicitly indicated by Doherty, by providing the system more time to compile and prepare the ad, the system would be able to take advantage of image and video formats which are more compact than traditional MPEG and JPEG and would require much less storage size (paragraph 28).

Thus, appellant's arguments are not convincing, as one of ordinary skill would clearly be motivated to combine Doherty with Zigmond, so as to provide an advertising system which can respond to changing conditions while reducing delays and allowing the use of more compact compression techniques.

On page 10, appellant argues that Doherty discloses wherein the schedule is altered "in response to" user interactions and not "based upon" user interactions.

In response, Doherty discloses wherein the schedule will be altered in response to a user interaction (see paragraph 30). A new schedule of advertisements will then be generated based upon **a user profile** (see paragraph 31 and 38-47). The user profile specifically contains user activity information, including current user activity information (see paragraph 31). Thus, Doherty clearly discloses wherein the schedule is altered *based upon* the user's interactions, as the user interaction indicates a time to reorder

the schedule and the user interaction is specifically used in selecting the new advertisements to include within the schedule.

On page 10, appellant argues that Doherty's schedule is not altered "according to program content displayed as a result of the detected change."

In response, as indicated in the rejections, Zigmond was relied upon to disclose selecting advertisements according to displayed program content (column 12, lines 44-59) and detecting changes in displayed program content (column 10, lines 40-47 and column 11, lines 13-18).

Doherty discloses generated a schedule of advertisements and altering that schedule *based upon* user interactions, such as the current content displayed to the user (restaurants; paragraph 31).

Thus, the *combination* of Zigmond and Doherty clearly disclose altering the schedule (as taught by Doherty) according to the program content displayed (as Doherty discloses wherein the ad is selected based upon the currently viewed content, and Zigmond discloses wherein the ads are selected based upon the currently viewed *television program* content) as a result of the detected change (as Doherty discloses detecting the changing user interaction and Zigmond discloses detecting user channel changes).

On pages 11-12, appellant argues that the combination of Zigmond and Doherty would not teach the limitation of "modifying the order in which the unscheduled

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advertisements are to be inserted according to program content displayed as a result of the detected change.”

In response, Zigmond discloses an advertisement system wherein advertisements are selected based upon the current conditions (i.e. displayed program content; column 12, lines 44-53) and wherein the current conditions (i.e. the displayed program) may change (as the user may change the channel).

Doherty discloses a advertisement system wherein a plurality of advertisements are selected based upon the current conditions (see paragraph 25 and paragraphs 38-47). Doherty further discloses wherein the listing of advertisements will be altered based upon a change in the current conditions (paragraphs 30-31, 38-47 and 52).

Thus, the combination of Zigmond and Doherty would clearly provide for selecting a plurality of advertisements based upon the current displayed program and altering the advertisements based upon a change in the displayed program.

As indicated above, this modification of Zigmond would allow for the advertising system to use reduce the required storage space by allowing the use of more compact compression techniques, while continuing to provide advertisements appropriate to the current conditions, such as advertisements related to the television program currently being viewed. Therefore, appellant's arguments are not convincing.

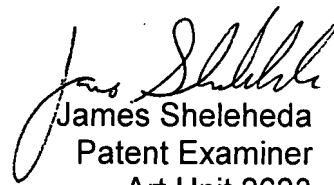
#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,




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JS

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